

CLAIMS

1. A method for communicating data representing a media object encoded into classified data representing base layer information and enhancement layer information through a network fabric comprising the steps of:
 - 5 transmitting (230) a composition of the classified data as prioritized data in response to network conditions wherein the classified data comprises at least one of base layer information with associated parity information;

adjusting (240) a composition of prioritized data for transmission in response to a change in network conditions wherein the composition of classified data is
10 modified with enhancement layer information.
2. The method of Claim 1, wherein the classified data is pre-encoded.
3. The method of Claim 1, wherein the transmitting step is enabled by a
15 multimedia server.
4. The method of Claim 1, wherein the prioritized data is encoded by an encoding operation selected from at least one of: temporal scalability and data partitioning.
- 20 5. The method of Claim 1, wherein the prioritized data is transmitted as data packets that are sequentially numbered.
6. The method of Claim 1, wherein the adjusting step reduces an amount of the enhancement layer information and increases an amount of the base layer parity data

forming the composition of priority data when network conditions degrade rendering the media object.

7. The method of Claim 1, wherein the adjusting step reduces an amount of the
5 base layer information and associated parity information and increases an amount of the enhancement layer information and associated parity data forming the composition of priority data when network conditions are favorable for rendering the media object.
- 10 8. The method of Claim 1, wherein the classified data is pre-encoded by a forward error correction code operation using Reed Solomon codes and the classified data is stored according to data class.
- 15 9. The method of Claim 8, wherein a multimedia server selects the composition of prioritized data to be transmitted based on network conditions by accessing a data store corresponding to data class.
10. The method of Claim 1, wherein more than one layer of enhancement information and associated priority data form the classified data.
- 20 11. The method of Claim 1, wherein network conditions considered during the transmission step comprise as least one of: available bandwidth, expected loss of transmitted data, actual loss of transmitted data based on a user profile, historic network conditions, and a specific request for the composition of classified data
25 transmitted as the prioritized data.

12. The method of Claim 1, wherein network conditions considered during the adjustment step comprise at least one of: a change in available bandwidth, a change in the expected loss of transmitted data, a change in the loss of transmitted data, and a request to change the composition of classified data transmitted as the prioritized data.

13. A method for communicating data representing a media object comprising the steps of:

determining network conditions:

transmitting (230) prioritized data in accordance with network conditions, wherein

the prioritized data is generated as a composition of classified data representing at least one base layer of information and at least one enhancement layer of information with parity data being associated with each layer of information; and

the composition of transmitted base layer information with associated parity data and the enhancement layer information with associated parity data is determined in response to network conditions.

14. The method of Claim 13, wherein more base layer parity data is transmitted in the composition of classified data when network conditions result in a loss of data.

15. The method of Claim 13, wherein more enhancement layer information is transmitted in the composition of classified data when network conditions result in more data being successfully received.

16. The method of Claim 13, wherein prioritized data is sent in the form of data packets.

17. The method of Claim 16, wherein data packets are packed with more
5 enhancement layer information with associated parity data when space is available.

18. The method of Claim 13, wherein the composition of classified data
transmitted as the prioritized data is changed in response to a request from a
decoder.

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19. The method of Claim 13, wherein network conditions considered during the
determination step comprise as least one of: available bandwidth, expected loss of
transmitted data, actual loss of transmitted data based on a user profile, historic
network conditions, and a specific request for the composition of classified data
15 transmitted as the prioritized data.

20. A method for decoding communicated data representing a media object
comprising the steps of:

20 processing (320) prioritized data, wherein the prioritized data represents a
composition of classified data that is pre-encoded into at least one base layer of
information and at least one enhancement layer of information with parity data being
associated with each layer of information; and

requesting (330) that the composition of classified data transmitted as
prioritized data change to reflect different network conditions.

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21. The method of Claim 20, wherein the processing step uses Forward Erasure Correction (FXC) for generating missing layer information from the parity data associated with the layer missing such information.